

STATEMENT OF THE CLAIMS

1-36 (canceled)

37. (new) A fixation plate for use with a plurality of fixation pegs having threaded heads and a K-wire, comprising:

a substantially rigid plate defining a first set of peg holes each structurally adapted to engage the threaded head of one of the fixation pegs, and at least one non-threaded first alignment hole, each of said peg holes having a first diameter, and said at least one first alignment hole having a second relatively smaller diameter sized to closely receive the K-wire in a predetermined axial orientation which is oblique relative to a bone contacting surface of said plate, said at least one first alignment hole being located between two respective peg holes.

38. (new) A fixation plate according to claim 37, wherein:

said at least one first alignment hole defining a tangent line which is substantially coincident with a line tangent to said first set of threaded peg holes.

39. (new) A fixation plate according to claim 37, wherein:

said plate has a body and a head, with said head angled upward relative to said body, and said first set of peg holes is provided in said head.

40. (new) A fixation plate according to claim 39, wherein:

said head has a lower surface, and said lower surface non-planar.

41. (new) A fixation plate according to claim 39, wherein:

said head includes medial and lateral sides, and said medial side extends distally extended relative to said lateral side.

42. (new) A fixation plate according to claim 39, wherein:

said head includes a second set of peg holes having means to engage fixation pegs with threaded heads, said first set being longitudinally arranged, said second set being longitudinally arranged, and said second sets being longitudinally offset relative to said first set.

43. (new) A fixation plate according to claim 42, wherein:

said head includes a distal non-threaded alignment hole between two pegs holes of said second set of peg holes.

44. (new) A fixation plate according to claim 43, wherein:

said distal alignment hole has an upper circular opening and a lower laterally oblong opening.

45. (new) A fixation plate according to claim 39, wherein:

said head and body together generally form a T-shaped plate configuration, and said head includes a lower surface, a lateral side, a medial side and a central portion, and

said lower surface at said lateral and medial sides is directed upward relative to said lower surface at said central portion.

46. (new) A fixation plate according to claim 37, wherein:

each of said peg holes is structurally adapted to engage a fixation peg by including an internal thread.

47. (new) A fixation plate according to claim 37, wherein:

for n peg holes in said first set, a substantially linear arrangement of n-1 first alignment holes is provided, said peg holes and said first alignment holes provided in an alternating arrangement.

48. (new) A fixation plate for use with a plurality of fixation pegs with threaded heads and a K-wire, comprising:

a substantially rigid plate having a body and a head, with said head angled upward relative to said body, said head defining a first set of longitudinally displaced peg holes each structurally adapted to engage the threaded head of one of the fixation pegs, and a first non-threaded alignment hole substantially smaller in diameter than said peg holes and laterally displaced between two peg holes of said first set of peg holes, said first non-threaded alignment hole sized to closely receive the K-wire in a predetermined axial orientation which is oblique relative to a bone contacting surface of said plate.

49. (new) A fixation plate according to claim 48, wherein:

said head defines a second set of peg holes each structurally adapted to engage the threaded head of one of the fixation pegs, wherein said first set is arranged substantially along a first line, and said second set is arranged substantially along a second line, and said first and second lines are longitudinally displaced relative to each other, said head further including a second non-threaded alignment hole substantially smaller in diameter than each of said second set of peg holes and laterally displaced between two peg holes of said second set of peg holes, said second non-threaded alignment hole sized to closely receive the K-wire in a predetermined axial orientation which is oblique relative to said bone contacting surface of said plate.

50. (new) A fixation plate according to claim 49, wherein:

said first set of peg holes and said first alignment hole are all obliquely orientated in at least one dimension relative to each other.

51. (new) A fixation plate according to claim 48, wherein:

said first set of peg holes and said first alignment hole are all obliquely orientated in two dimensions relative to each other.

52. (new) A fixation plate according to claim 48, wherein:

said first alignment hole has an upper circular opening and a lower laterally oblong opening.

53. (new) A fixation plate according to claim 48, wherein:

said at least one first alignment hole defines a tangent line which is substantially coincident with a line tangent to one of threaded peg holes.

54. (new) A fixation plate according to claim 48, wherein:

said head defines a distal taper.

55. (new) A fixation plate according to claim 48, wherein:

said plate includes a second alignment hole, and said at least one first alignment hole and second alignment hole are longitudinally displaced along said head.

56. (new) A fixation plate according to claim 48, wherein:

said body of said plate defines a shaft having a plurality of screw holes.

57. (new) A fixation plate according to claim 56, wherein:

said shaft includes an alignment hole longitudinally displaced between two of said plurality of screw holes.

58. (new) A fixation plate according to claim 48, wherein:

a longitudinal axis through said plate extends through said first non-threaded alignment hole.

59. (new) A fixation plate for use with a plurality of fixation pegs having threaded heads and a K-wire, comprising:

a substantially rigid plate defining

a first set of set of peg holes substantially arranged along a first line and a second set of peg holes substantially arranged along a second line, said first and second line being longitudinally displaced, said peg holes each structurally adapted to engage the threaded head of one of the fixation pegs, wherein said peg holes of said first set laterally alternate with said peg holes of said second set, and

a non-threaded alignment hole having a substantially smaller diameter than any of said peg holes and sized to closely receive the K-wire said second non-threaded alignment hole sized to closely receive the K-wire in a predetermined axial orientation which is oblique relative to a bone contacting surface of said plate.

60. (new) A fixation plate according to claim 59, wherein:

said plate has a body and a head, with said head angled upward in a Z-direction relative to said body, and said first and second sets of peg holes are provided in said head.

61. (new) A fixation plate according to claim 60, wherein:

said alignment hole is laterally located between two peg holes of said first set of peg holes.

62. (new) A fixation plate according to claim 59, wherein:

said alignment hole is laterally located between two peg holes of said second set of peg holes.

63. (new) A fixation plate according to claim 62, wherein:

said alignment hole has a circular upper opening and a laterally oblong lower opening.

64. (new) A fixation plate according to claim 53, wherein:

said peg holes define axes which are obliquely angled relative to each other, and said proximal alignment hole is at an oblique angle relative to said peg holes.

65. (new) A system for fracture fixation of the distal radius, comprising:

a) a plate having a body portion and a head portion angled relative to said body portion, said body portion defining at least one screw hole, and said head portion defining a plurality of peg holes each structurally adapted to engage a fixation peg with a threaded head and a plurality of substantially smaller non-threaded alignment holes laterally displaced relative to said peg holes, said alignment holes sized to closely receive a K-wire in a predetermined axial orientations, at least one of said alignment holes having an axis which is oblique relative to a bone contacting surface of said plate;

- b) at least one screw sized for insertion into said at least one screw hole;
- c) a plurality of pegs each having a threaded head and a shaft, said pegs sized for insertion into said peg holes; and
- d) a plurality of K-wires, wherein said alignment holes are sized to closely receive said K-wires.

66. (new) A system according to claim 65, wherein:

said head portion of said plate includes stabilization means to prevent said head portion from rocking on the distal radius prior to mechanically coupling said head portion to the bone.

67. (new) A system according to claim 65, wherein:

said a plurality of pegs includes at least one peg with a threaded shaft and at least one peg with a non-threaded shaft.

68. (new) A system according to claim 65, wherein:

said at least one alignment hole is situated between two adjacent peg holes.

69. (new) A system according to claim 66, wherein:

said stabilization means includes a non-planar bone contacting surface on said second portion.

70. (new) A fixation plate, comprising:

a substantially rigid plate having a body and a head, with said head angled upward relative to said body, said head defining a first set of longitudinally displaced peg holes each defining structure adapted to be engaged by a peg having a threaded head, and a second set of non-threaded alignment holes substantially smaller in diameter than said first set of peg holes and each sized to closely receive a K-wire, said first and second sets being substantially parallel.

71. (new) A fixation plate according to claim 70, wherein:

said first and second sets defines a common tangent line.

72. (new) A fixation plate according to claim 70, wherein:

said plate includes a non-threaded alignment hole which is longitudinally displaced from said second set.

73. (new) A fixation plate according to claim 70, wherein:

said head defines a distal taper.

74. (new) A fixation plate according to claim 70, wherein:

said body of said plate defines a shaft having a plurality of screw holes.

75. (new) A fixation plate for use with a plurality fixation pegs having threaded pegs and a plurality of K-wires comprising:

a substantially rigid plate defining a first set of substantially linearly arranged peg holes each defining structure adapted to be engaged by the head of one of the fixation pegs, and a second set of substantially linearly arranged non-threaded alignment holes, each of said peg holes having a first diameter, and said alignment holes having a second relatively smaller diameter sized to closely receive and retain individual K-wires in predetermined axial orientations which are oblique relative to each other.

76. (new) A fixation plate according to claim 75, wherein:

wherein for n peg holes in said first set, $n-1$ alignment holes are provided in said second set.

77. (new) A fixation plate according to claim 75, wherein:

said peg holes and said alignment holes are provided in an alternating arrangement.

78. (new) A fixation plate according to claim 75, wherein:

said peg holes define predetermined and distinct axial orientations for the fixation pegs.